

XIX. *Notes on Chalcididæ; and Description of a new species of Megastigmus.* By F. WALKER, F.L.S.

[Read 7th June, 1869.]

A FEW species of *Megastigmus* inhabit England. *M. giganteus*, the largest species of the genus hitherto described, is a native of S. Europe. *M. Pistaciæ*, so named by Haliday, and presented by him to the British Museum, is a very elegant Italian species. The known Australian species are smaller than most of those of Europe. *M. Pinus* of Parfitt, and the species here described, are natives of California, and are both of large size. There is an affinity in structure, colour, and markings between some species of this genus and some of *Decatoma*. The latter genus is one of the *Eurytomidæ*, and, like *Megastigmus* and *Eurytoma*, is parasitic, on gall-making insects. A North-American species of the *Eurytomidæ* was described many years ago as *Eurytoma hordei*. Harris, the original describer, Fitch, and Walsh, at first supposed it to be parasitic, but were afterwards convinced that the larva is herbivorous. Walsh has recently observed that it is not a *Eurytoma*, but an *Isosoma*, and that it is very injurious to the corn in the Eastern States from Virginia to Canada. He supposes that all the species of *Isosoma* are herbivorous, and that *Eurytoma hordei*, Harris; *E. tritici*, Fitch; *E. secalis*, Fitch; and *E. fulvipes*, Fitch, are one species. I have reared several species of *Eurytoma* from various kinds of galls, but never had an opportunity of observing the transformation of *Isosoma*. The British species of the latter genus are numerous, and various in structure, and some of them are yet undescribed. Giraud reared in Austria three species of *Isosoma* and *Pimpla graminellæ*, Grav., from *Triticum repens*, and believed them to be all parasitic on a Dipterous insect. If these species of *Isosoma* are herbivorous, it would seem that *Pimpla graminellæ*, an ichneumon-fly, which much exceeds them in size, and is very abundant in England, is their parasite. Walsh observes that one of the *Pteromalidæ*, which he names *Semiotellus chalcidiphagus*, is parasitic on *Isosoma hordei*. He also describes *Antigaster mirabilis*, a new genus, allied to *Eupelmus* and to *Notanisus*. *Chiropachys colon*, of which the natural history was lately noticed

by Dr. Algernon Chapman, is allied to the *Eupelmidæ*, and the earliest descriptions of it are here mentioned:—

Sphex colon, Linn. Faun. Suec. 1656; Syst. Nat. 945.

Ichneumon quadrum, Fabr. Ent. Syst. ii. 186.

Megastigmus albifrons.

Mas. Luteus; capite thoraceque dense punctatis; capite thorace latiore, plaga transversa nigra, fronte facieque albidis, antennis nigris, basi luteis; thorace vitta nigra, prothorace magna quadrata, mesothorace nigro-bimaculato, metathorace nigro; abdomine nigro, valde compresso, subtus luteo; alis diaphanis nigro-venosis, anticis gutta nigricante maculaque nigra.

Male. Luteous. Head and thorax thickly punctured. Head broader than the thorax; a large transverse black patch on the vertex, extending nearly to the eyes; front and face whitish; eyes piceous; antennæ black, filiform, rather shorter than the thorax, first joint luteous, joints of the flagellum successively decreasing in length; club fusiform, a little broader than the preceding joint. Thorax with a black stripe, which is attenuate in the middle, and extends from the fore-border of the prothorax nearly to the tip of the scutellum; prothorax quadrate, much developed; mesothorax with a black spot on each side of the scutum, sutures of the parapsides very distinct; metathorax black. Abdomen black, much compressed, luteous beneath, nearly as long as the thorax. Legs slender; tarsi black towards the tips. Wings pellucid; veins black; fore-wings with an indefinite blackish dot adjoining the hind side of the humerus, near the end of the latter, and with a determinate black spot at the end of the cubitus, as is usual in this genus; humerus about four times the length of the ulna, emitting a transverse veinlet to the hind border, near the inner side of the dot before-mentioned; radius more than twice the length of the ulna; cubitus about half the length of the ulna.

Length of the body, 2 lines; of the fore-wings, $3\frac{3}{4}$ lines.

“Found alive, in a glass-topped box, containing a fir cone, from California.” March 10th, 1869.

British Museum.